

BEFORE THE BOARD OF
NATURAL RESOURCES AND CONSERVATION
OF THE STATE OF MONTANA

In the Matter of the)	
Designation of the Larson)	
Creek Controlled)	Proposal for Designation
Groundwater Area as)	
Permanent.)	

* * * * *

Pursuant to Section 85-2-506 through 85-2-508, MCA (1987), the Board of Natural Resources and Conservation (Board) held a hearing in the above captioned matter on August 8, 1988 in Hamilton, Ravalli County, Montana. Upon petition by homeowners, domestic well users in the area, and after proper notice and hearing, on November 16, 1984, the Board issued a final order, designating the Larson Creek as a Temporary Controlled Groundwater Area. The Board issued an order extending the Temporary Designation for an additional two year period on November 7, 1986.

As noted above, the Board held the requisite hearing on a permanent designation on August 8, 1988, and the matter is, therefore, now properly before the Board.

I. Summary of the Case

A. Facts

The Board designated the Larson Creek area as a temporarily controlled groundwater area in 1984, upon petition of most of the homeowners in the area. The petitioners all supply their own domestic water needs from wells. The Larson Creek area is west

of Stevensville, Ravalli County, Montana. Larson Creek, the primary source of natural surface water stream recharge in the area, drains the Bitterroot mountains in a generally northeasterly direction. It is a tributary of Kootenai Creek. After proper public notice and hearing, the Board designed the area temporarily controlled. The purpose of this designation was, as contemplated by the applicable statutory scheme, to control additional withdrawals from the aquifer while further study on the problem could be carried out. The first year of designation having been largely taken up by establishing a study methodology and procedures for gathering data, there had been only about one year of data gathered. As testified to by Rich Brasch in 1986, the Department of Natural Resources and Conservation (Department) and the petitioners stipulated to a recommendation for extension of the temporary designation for an additional two years.

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The petitioners and the Department conducted further study for the additional period, including monitoring four wells, and conducting uncontrolled experiments on surface water recharge to the aquifer.

Petitioners and other homeowners in the area divert their domestic water supply from the aquifer in issue through wells drawing from about 70-100 feet below the ground surface. The aquifer in issue is recharged by Larson Creek, precipitation,

irrigation, and seepage from natural and man-made watercourses. As water has become more scarce, (relative to demand), conservation-minded ditch users have replaced their ditches with pipes, or have otherwise limited leakage therefrom. These conservation measures are commendable, and well within the rights of those who take them, but leave the people who have relied on historic ditch losses for aquifer recharge high-and-dry.

The seasonal difficulties the petitioners experienced in 1984 have, since then, apparently remained or increased, despite the limitation on future withdrawals from the aquifer. As a practical matter, only one additional withdrawal has been sought, and the limited geographical area of the designation, both as to surface area and vertical extent, effectively limits immediate additional demand, absent division of current land ownership into additional parcels.

The uncontroverted expert opinion testimony of the Department geohydrologist in charge of the Larson Creek studies, Mark Shapley, that permanent limitations on additional aquifer withdrawals would slow the rate at which the aquifer is currently being depleted, but would not remedy the fundamental problem of insufficient recharge. His recommendation to alleviate the existing homeowners problems was to increase the recharge to the aquifer by 7-15 acre-feet per year. See report to the Board,

purposes, by Mike McLane; and

4. Statement of Request for Permanent Designation by Mr. Burnell.

Based upon the entire record herein, the Hearing Examiner makes the following proposed:

FINDINGS OF FACT

1. The Board published notice of the August 8, 1988 hearing once a week for three consecutive weeks in newspapers of general circulation in the area of Larson Creek, the Missoulian and the Ravalli Republic. The last notice was thirty days prior to hearing, the notices having been published on June 24, July 1 and July 8, 1988. Proof of publication has been placed in the board file (See Board file).

2. All parties who appeared at the first hearing were served personal notice by mail at least thirty days before the hearing. Further, notice was mailed to all land owners of record in the area, landowners adjacent to the closure area, the Bitterroot National Forest, and water well drillers. The affidavit of service appears in the Department file.

3. The Board adopts by reference the Findings of Fact entered in its August 16, 1984, Proposal for Decision, and the Order Extending Temporary Designation for an Additional Two Year period, November 7, 1986.

4. The Board appointed Sarah Bond as Hearing Examiner for

August 5, 1988. (Report) Mr. Shapley concluded that the studies showed that the aquifer could be recharged by augmentation of Larson Creek from neighboring creeks, or by slowing the rate of surface discharge by impounding water in the upper end of the Larson Creek drainage. See page 3, August 8, 1988 Shapley report to the Board, (Report).

B. Parties

The following persons attended the hearing on August 8, 1988:

Mark Shapley, DNRC
Mike McLane, DNRC
Ronald Guse, DNRC
Dee and Colè MacPherson
Maurice and Esta Owen
Fred and Pat Burnell
Mr. and Mrs. McBride
Edward and Charlotte Kunkel
Leo Lubbers
Sarah A. Bond, DNRC
Fred and Patricia Burnell
Lonnie Umphlett

C. Exhibits

The following were admitted into evidence at the August 8, 1988 hearing:

1. The parties stipulated to the admissions of the Department file;
2. Report to the Board, August 8, 1988 by Mark Shapley;
3. Maps, submitted for illustrative and demonstrative

the August 8, 1988 hearing.

5. Several of the petitioners appeared at the August 8, 1988 hearing. Petitioners submitted a statement entitled "Statement - Larson Creek Controlled Groundwater Area". The statement, a copy of which is attached hereto, supports the permanent designation of the controlled groundwater area. It lists some of the measurements which the petitioners and Department have taken. It includes that the aquifer is currently being depleted at a rate in excess of its recharge, that Larson Creek recharges the aquifer, that the upper wells are already adversely affected by the excess withdrawals, and that the lower wells will eventually be affected if the situation is not reversed. The Statement concludes that a permanent controlled groundwater designation should not only limit future withdrawals, but could allow petitioners to "seek methods of restoring the balance between water use and water recharge."

6. Dee MacPherson, a homeowner in the area and one of the petitioners for the controlled status in 1984, said she was experiencing trouble with her domestic well, and expressed concern that a permanent designation would prevent her from redrilling the well to correct these problems.

7. None of the attendees at the hearing disputed the geohydrologist's conclusion that, a) the aquifer is currently being "mined" (withdrawals exceed recharge), b) that permanent

designation limiting additional withdrawals will slow but not reverse the mining and, that, c) recharge augmentation through increased surface water discharge down Larson Creek would alleviate the petitioners' problems.

8. The wells on the lower end (closer to the Bitterroot River) benefit from the storage capacity of the aquifer, so are less subject to dramatic fluctuations in static well levels than are the wells in the upper end of the area.

9. Water in Larson Creek effectively recharges the aquifer. The petitioners and Department attempted to measure the nature and extent of recharge by manipulating flows in Larson Creek. (Report, page C.1.)

10. The public health, safety and welfare of the well users in the Larson Creek area requires, a corrective control be adopted.

11. The facts alleged in the Statement of petitioners are true. (See petitioners Exhibit 1.)

12. Two ditches in the area were replaced by pipelines. These are the Latta and Bosckis ditches. The Bosckis ditch improvement was completed prior to the first temporary designation. The Latta ditch improvement occurred during the study period. The parties generally agreed that the map submitted by Mike McLane, Missoula Water Rights Bureau Field Manager, more or less accurately depicted the position of these

ditches in relation to the area, Larson Creek, and the affected wells.

13. In response to a question by the Hearing Examiner, Mr. Shapley responded that the transmissivity of the aquifer, coupled with the study data as a whole, indicated that well interference was not a serious problem. In response to a question whether he thought the well spacing limitation placed on the temporary designation should be continued, Mr. Shapley indicated he did not think it was very important.

WHEREFORE, based on the foregoing and on the entire record herein Hearing Examiner makes the following:

CONCLUSIONS OF LAW

1. The Board gave proper notice of the hearing pursuant to Section 85-2-507 (5)(b), MCA (1987). All other requirements of law or rule have been met and, therefore, the matter is properly before the Board.

2. Prior to the expiration of the extended temporary designation, the Board held a hearing to determine whether sufficient facts had been gathered during the study period to designate permanently the areas as controlled. The parties at the hearing disagreed about some specifics of the study, but generally agreed that they needed to augment their aquifer recharge to replace seepage previously available from the Bosckis and Latta ditches.

appropriate surface water or groundwater by other; or
(iii) the facts alleged in the petition as required by
85-2-506(2) are true.

Section 85-2-507(2), MCA (1987).

5. The Board may enter an order including the following
control measures:

(a) a provision closing the controlled groundwater area to further appropriation of groundwater, in which event the department shall thereafter refuse to accept any applications for beneficial water use permits to appropriate groundwater located within such controlled area;

(b) a provision determining a permissible total withdrawal of groundwater in the controlled area by day, month, or year and permitting the board to apportion such permissible total withdrawal among the appropriators holding valid rights to the groundwater in the controlled area in accordance with the relative dates of priority of such rights;

(c) a provision according preference, without reference to relative priorities, to withdrawals of groundwater in the controlled area for domestic and livestock purposes first and thereafter to withdrawals for other beneficial purposes, including but not limited to agricultural, industrial, municipal (other than domestic), and recreational purposes, in such order as the board considers advisable under the circumstances;

(d) a provision reducing the permissible withdrawal of groundwater by any appropriator or well in the controlled area;

(e) when two or more wells in the controlled area are used by the same appropriator, a provision adjusting the total permissible withdrawal of groundwater by the appropriator or a provision forbidding the use of one or more such wells;

(f) a provision requiring and specifying a system of rotation of use of groundwater in the controlled area;

(g) provisions making such additional requirements as are necessary to protect the public health, safety, and welfare in accordance with the intent, purposes, and requirements of this part and the laws of the state.

3. The Board has sufficient information in the record to enter an order permanently designating the aquifer in issue as controlled. (See Findings of Fact, 10 and 11.) The facts as presented in Mark Shapley's report were undisputed. The studies have shown that the aquifer as defined in the Board Final Order of November 16, 1984, and its extension order of November 7, 1986 is indeed the source of water for the area wells tapped to depths less than 70 feet. (See Report, page 1, appendix 1.) Over the study period the well behavior graphs show a general decline in static well levels. The data also shows the aquifer experiences insufficient aquifer recharge for periods when no surface water exists in Larson Creek. The surface water manipulation studies show that Larson Creek is capable of increasing recharge if it is augmented by flows from other sources or if small improvements are constructed to slow the flow through the upper end of the drainage, where the Creek's ability to recharge and the greatest aquifer needs exist. (Report, page F.4.)

4. The Board may enter an order designating the area permanently controlled, if it finds on the basis of the hearing that:

- (a) the public health, safety, or welfare requires a corrective control be adopted; and
- (b) (i) there is a wasteful use of water from existing wells or undue interference with existing wells;
(ii) any proposed use or well will impair or substantially interfere with existing rights to

appropriate surface water or groundwater by other; or
(iii) the facts alleged in the petition as required by
85-2-506(2) are true.

Section 85-2-507(2), MCA (1987).

5. The Board may enter an order including the following
control measures:

(a) a provision closing the controlled groundwater area to further appropriation of groundwater, in which event the department shall thereafter refuse to accept any applications for beneficial water use permits to appropriate groundwater located within such controlled area;

(b) a provision determining a permissible total withdrawal of groundwater in the controlled area by day, month, or year and permitting the board to apportion such permissible total withdrawal among the appropriators holding valid rights to the groundwater in the controlled area in accordance with the relative dates of priority of such rights;

(c) a provision according preference, without reference to relative priorities, to withdrawals of groundwater in the controlled area for domestic and livestock purposes first and thereafter to withdrawals for other beneficial purposes, including but not limited to agricultural, industrial, municipal (other than domestic), and recreational purposes, in such order as the board considers advisable under the circumstances;

(d) a provision reducing the permissible withdrawal of groundwater by any appropriator or well in the controlled area;

(e) when two or more wells in the controlled area are used by the same appropriator, a provision adjusting the total permissible withdrawal of groundwater by the appropriator or a provision forbidding the use of one or more such wells;

(f) a provision requiring and specifying a system of rotation of use of groundwater in the controlled area;

(g) provisions making such additional requirements as are necessary to protect the public health, safety, and welfare in accordance with the intent, purposes, and requirements of this part and the laws of the state.

Section 85-2-507(4), MCA (1987).

6. The measures listed above apply to the order proposed herein. Section 85-2-507(5)(b), MCA (1987) provides, "Facts gathered during the study period shall be presented at a hearing prior to the designation or modification of a permanent controlled groundwater area. The hearing shall be conducted by the board in the manner of the first hearing, and the board shall make written findings of fact and conclusions of law and issue and order according to the provisions set forth in subsections (1) through (4)".

7. The corrective measures specified in subparagraphs (a)-(g) above, would not be well tailored to the situation before the board. Subparagraph (a) is too drastic. The aquifer in issue is apparently capable of accepting additional recharge if available. If a later appropriator can augment aquifer recharge, and otherwise meet a stricter burden than a water permit applicant, there is no reason to preclude additional uses. That is, subsequent appropriators should have the opportunity to develop a plan for withdrawal without adversely affecting other appropriators. Since well interference is not a real problem, subparagraph (b) is inappropriate. Subparagraph (c) does not help, as all the current uses are domestic. Subparagraph (d) does not address the real problem and in any event there have never, in four years and three hearings, been any serious

allegations of wasteful uses from this aquifer. Subparagraph (e) does not apply, and subparagraph (f) is not available because the record is devoid of any facts needed to develop a rotation system. Unlike irrigation, domestic uses absent storage are relatively constant.

The Board is left, then, to its own devices to craft a remedy to address this situation under authority of Section 85-2-507(4)(g), MCA (1987).

First, the limitation on future appropriations in the manner outlined in the Board extension order of November 7, 1986, will mitigate the current aquifer mining. Second, the insufficient recharge can apparently be remedied by creating small impoundments in the upper end of the Larson Creek drainage and/or by increasing the surface water recharge down Larson Creek. When, and if, the petitioners chose to develop such a plan, the Board may consider it for inclusion in its order.

8. The Board's authority to allow the petitioners to develop an augmentation plan derives from Section 85-2-507(4)(g) and 85-2-507(8), MCA (1987). Although insufficient detail has been presented on this record to include a plan in this order, the petitioners are free to devise a plan for recharge augmentation, and present it to the Board for subsequent inclusion into this order. Impoundments or other surface water augmentation may enable the petitioners to increase the recharge

by approximately 7 to 10 are feet annually. This recharge will replace recharge recently lost to the aquifer because the Bosckis and Latta ditch losses have been eliminated through installation of pipes therein. Petitioners may propose mere stream bed manipulation, creation of impoundments, or importation of water from another area for discharge into Larson Creek.

The Board has the authority to exercise continuing jurisdiction over the Larson Creek area. Section 85-2-507(8), MCA (1987) provides: "The board may by order suspend, modify or revoke any order made as provided by this section upon such notice and in such manner as is reasonable under the circumstances. A copy of each suspension, modification or revocation shall be served or filed and recorded as provided for orders in subsection (7)."

Few areas are so fraught with difficulty of proof as groundwater cases. The Board must have the authority to deal with each case according to its own fact as shown by the available expert opinion. In upholding action challenged as beyond an agency's authority, the Montana Supreme Court has held;

Where the question involved is within the jurisdiction of an administrative tribunal which demands the exercise of sound administrative discretion requiring the special knowledge, experience and services of trained officers to determine technical and intricate matters of fact, ... the courts will inquire only so far as to see whether or not the action complaint of within the statute and not arbitrary or capricious.

Burke v. South Phillips County Co-Operative State Grazing District, 135 Mont. 209, 218 (1959).

9. Finally, 85-2-507 (4)(g), MCA (1987) properly allows the Board to exercise its expertise, in this case, to adopt a type of control not specified in 85-2-507 (4)(a-f). The Board has jurisdiction and authority to limit future additional withdrawals now, and to consider any specific augmentation plan whenever petitioners or others prepare one for consideration and inclusion in the order.

10. The final order recommended for adoption at the next Board meeting, is subject to Section 85-2-507(7), MCA (1987), and upon Board adoption, must be published and mailed to each petitioner as provided for therein.

11. Under Section §2-4-621, MCA (1987) this proposed order must be mailed to all attendees at the hearing for designation of a permanent controlled groundwater area. Further, each attendee must be notified of the time and place of the next Board meeting at which they may present briefs and oral arguments to the Board, prior to adoption of this as a final order.

Summary of Proposed Order

Given the statutory discretion delegated to the Board to fashion a remedy, the Hearing Examiner recommends the Board adopt the following as a proposed order. The Board has information sufficient to designate the area permanently controlled, because

of the uncontroverted evidence that the wells in the area, most severely the wells in the upper end, experience seasonal lows and periodically are incapable of supplying the homeowners' domestic needs. The Board also has sufficient evidence to conclude that the problems experienced by the present homeowners will be mitigated, but not relieved, by the prevention of future uncontrolled withdrawals from the aquifer, and that the aquifer is capable of storing additional water and supplying existing needs if it is recharged by precipitation, ditch leakage, or other surface water discharged over the aquifer.

On the other hand, the Board does not have sufficient knowledge of the details of a plan that will provide the needed additional recharge to the aquifer. While the Department's expert has concluded that augmentation is feasible through some manipulation of the Larson Creek drainage in the upper end, he has also admitted that he could not specify exactly where the work would most effectively be done, or exactly what the best method of augmentation would be. "The aquifer is capable of absorbing this much recharge from the Larson Creek channel; a small impoundment or impoundments in the upper end of the closure area would probably allow this recharge to occur more efficiently, by retaining surface water for a longer period of time in a part of the Larson Creek channel with a suspected direct connection to the aquifer." Report, p. C.4. This is

sufficiently specific for concluding such augmentation could be designed. It is not specific enough that an engineer or hydrologist could, without more information, actually construct such a system. Therefore, the Board can only adopt the corrective control of limiting future withdrawals, leaving the door open for petitioners to draft a plan for Board consideration, at a later date.

WHEREFORE, based upon the foregoing, and upon the record herein, the Hearing Examiner hereby makes the following:

PROPOSED ORDER

That, effective upon adoption of this Proposed Order and until presentation of a plan for augmentation as provided below, the Larson Creek controlled groundwater area, is designated as a permanently controlled groundwater area.

The area is the ground surface area above a shallow aquifer approximately 50 - 70 feet below the surface of the ground and under approximately 150 - 200 acres of land along Larson Creek, in about the center of the E1/2 of Section 10 and the W1/2 of Section 20, Township 9 North, Range 20 West, Ravalli County, Montana, and further delineated on the map attached hereto.

During the period of designation, the Department shall accept Applications for Beneficial Water Use Permit to appropriate groundwater within the aquifer as follows: The

shallow aquifer is closed to further appropriation except: a) by the issuance of a permit for beneficial water use permit by the Department for uses applied for prior to January 1, 1987, and b) by applicants who prove the criteria of Section 85-2-311, MCA (1987), by clear and convincing evidence. All applicants except those in category a), shall submit with their application a plan for augmentation or overcome a rebuttable presumption that augmentation is necessary. The Department shall consider the use for augmentation and the use from the Larson Creek controlled groundwater area in the same proceeding.

Each Application for Beneficial Water Use Permit to appropriate by means of a well in the Larson Creek Controlled Groundwater Area shall be submitted to the Missoula Water Rights Bureau Field Office. No application for Beneficial Water Use Permit to appropriate by means of a well of less than 70 feet in depth will be approved for issuance unless the applicant proves the criteria in b) above. Applicants for wells greater than 70 feet shall also be required to apply for and receive a permit. Any wells permitted for a depth of more than 70 feet will be required to be constructed in such a manner that no well has perforations tapping the controlled aquifer, and that the controlled aquifer be sealed off with grout to prohibit leakage from the controlled aquifer to other aquifers. The Department will impose such other conditions on a case by case basis.

Respectfully submitted for the consideration of the Board
this 7th day of October, 1988.

-----*Sarah A. Bond*-----
Sarah A. Bond
Hearing Examiner